

**SYSTEM AND METHOD FOR PROVIDING A MEDICAL LEAD BODY**

**ABSTRACT OF THE DISCLOSURE**

An implantable lead and lead body, method of manufacturing  
5 the same, and a system and method for stimulating a portion of a  
body is disclosed. In one advantageous embodiment, a lead body  
assembly is formed by placing an inner layer of extrusion  
material on a mandrel, wrapping a plurality of conductors coated  
with extrusion material around the inner layer, and placing an  
10 outer layer of extrusion material over the plurality of  
conductors. Heat shrink tubing is placed over the lead body  
assembly and the lead body assembly is heated to melt the  
extrusion material. The melted extrusion material is compressed  
around the plurality of conductors. The assembly is then cooled  
15 and the heat shrink tubing is removed. The solidified extrusion  
material forms a protective wall that encapsulates the plurality  
of conductors in the lead body.